



# Region 4 Inventory and Monitoring Network

## Mobile Acoustical Bat Monitoring Annual Summary Report

2012

### WHITE RIVER NATIONAL WILDLIFE REFUGE



The Region 4 Inventory and Monitoring Network coordinated acoustical bat monitoring on 39 National Wildlife Refuges and 3 Ecological Services field offices in Regions 2, 3, and 4 in 2012. Surveys will establish baseline inventories of bats at each station and contribute to a landscape-level understanding of bat population trends and habitat associations. Bat call data were collected using Anabat SD2 detectors along 8-30 mile transects following the procedures outlined in the Mobile Bat Acoustical Survey Protocol (USFWS 2012).

This report summarizes bat calls collected along transects at your station in 2012. Calls were classified using EchoClass (v1.1) software, but classification of calls to species is not reported at this time due to ongoing software assessment and validation. Calls were geo-referenced and spatially projected for each survey period to identify relative bat use along transects. We will provide a revised annual summary report, transect shapefiles, and spatially referenced data output files once robust classifications to species are available. For surveys in which GPS data were not collected, a summary of the calls is presented without spatial reference.

All submitted call data and survey metadata have been archived and are available on the Mobile Acoustical Bat Monitoring SharePoint site (<https://fishnet.fws.doi.net/regions/4/nwrs/IM/bats>). Bat call files, GPS data, and survey metadata sheets were reviewed for quality assurance prior to generation of this report. Some submitted data were necessarily excluded due to identified errors in collection processes. All acoustical bat data will be summarized in a comprehensive project annual report following station-level reports.

# WHITE RIVER NATIONAL WILDLIFE REFUGE

**Route Name: WhrNWR Jacks Bay**

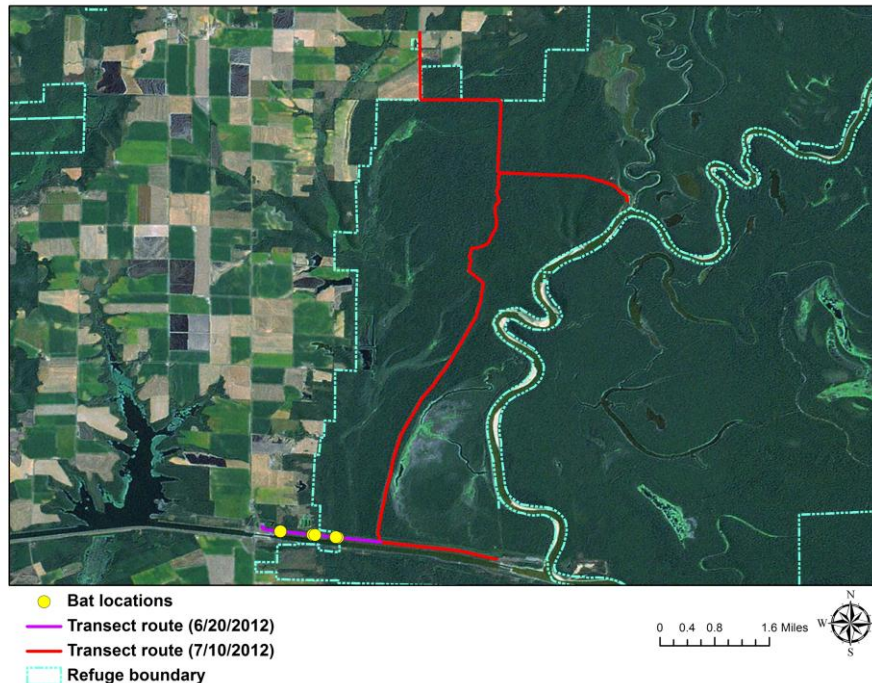
**Survey Date:** 6/20/2012

**Survey route completed?** ☒

**Number of bat calls recorded:** 125

**GPS data collected?** ☒

**Total length of transect (miles):** 1.48



<b>Observer 1:</b> Jay	Hitchcock
<b>Observer 2:</b> John	Stark
<b>Start Time:</b> 8:51:00 PM	<b>End Time:</b> 9:40:00 PM
<b>Start Temp:</b> 79	<b>End Temp:</b> 81
<b>Start Wind:</b> 0	<b>End Wind:</b> 0
<b>Start Cloud:</b> 5	<b>End Cloud:</b> 5
<b>Start Moon Visible?</b> <input type="checkbox"/>	<b>End Moon Visible?</b> <input type="checkbox"/>
<b>Moon Phase:</b>	New

## Survey Notes:

Back tracked from 21:00 -21:03 and 21:21-21:25 Datalogger Sensativity knob turned to zero. GPS failed at 20:5; QA/QC notes: On 6/20 the GPS unit failed 5 minutes into the run so the call files cannot be geo-ref. Map presents the few spatially referenced bat call files with the transect route recorded on 7/10 below it for reference. Purple line represents data collected on 6/20; red line represents data collected on 7/10.

# WHITE RIVER NATIONAL WILDLIFE REFUGE

## Route Name: WhrNWR Jacks Bay

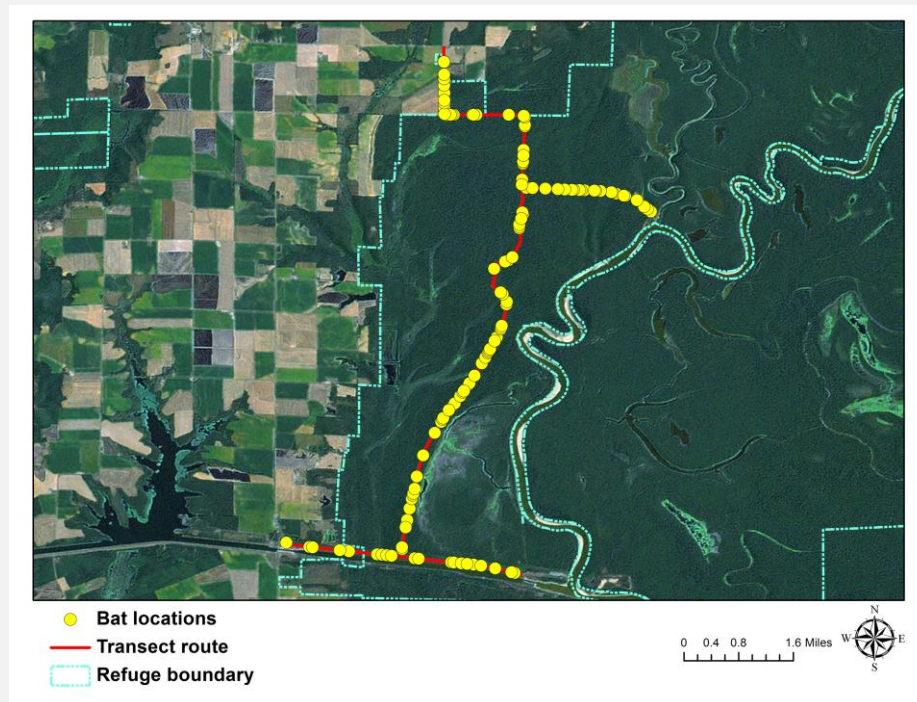
Survey Date: 7/10/2012

Survey route completed? ☒

Number of bat calls recorded: 131

GPS data collected? ☒

Total length of transect (miles): 13.61



Observer 1: Jay

Hitchcock

Observer 2: John

Stark

Start Time: 8:50:00 PM

End Time: 9:41:00 PM

Start Temp: 78

End Temp: 75

Start Wind: 1

End Wind: 1

Start Cloud: 70

End Cloud: 80

Start Moon Visible? ☐

End Moon Visible? ☐

Moon Phase: 1/4

### Survey Notes:

Back tracked from 8:59-9:02 and 9:21-9:25, Datalogger Sensativity knob turned to zero. Need to delete GPS overlap; QA/QC notes: significant back-tracking that must be accounted for prior to final data processing. Otherwise QA/QC of survey data revealed no errors.

# WHITE RIVER NATIONAL WILDLIFE REFUGE

## Route Name: WhrNWR Farm Unit

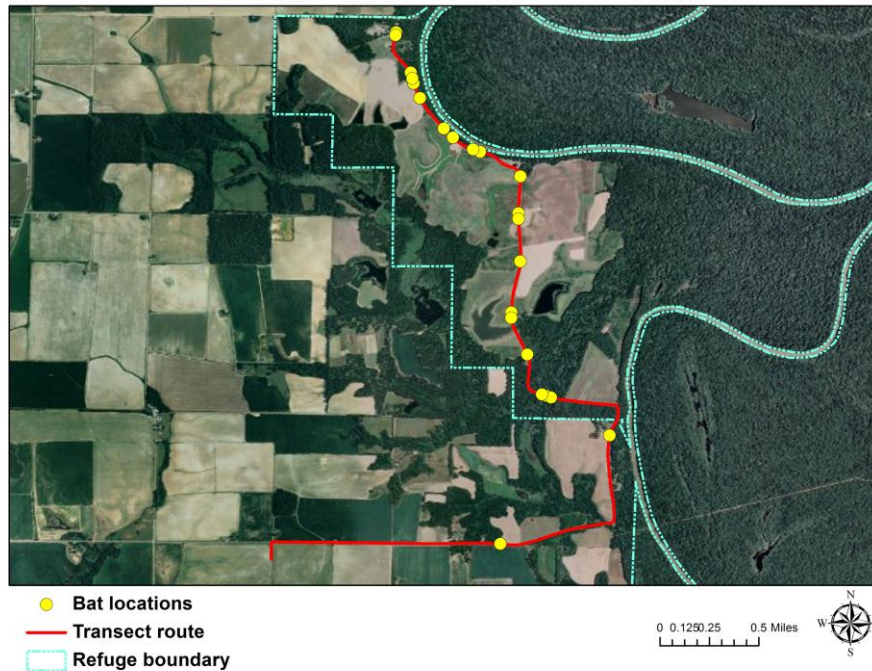
Survey Date: 6/25/2012

Survey route completed? ☒

Number of bat calls recorded: 23

GPS data collected? ☒

Total length of transect (miles): 4.57



Observer 1: Jay	Hitchcock
Observer 2: John	Stark
Start Time: 8:52:00 PM	End Time: 9:05:00 PM
Start Temp: 86	End Temp: 84
Start Wind: 0	End Wind: 0
Start Cloud: 0	End Cloud: 0
Start Moon Visible? <input checked="" type="checkbox"/>	End Moon Visible? <input checked="" type="checkbox"/>
Moon Phase: 1/4	

### Survey Notes:

Data separated from Long Lake Transect collected on same .DAT file. Sen. Knob placed at zero from 9:05 - 9:11. QA/QC notes: Farm Unit and Long Lake GTR transect routes run on the same nights and data was manually separated. QA/QC of survey data revealed no errors.



# WHITE RIVER NATIONAL WILDLIFE REFUGE

**Route Name: WhrNWR Farm Unit**

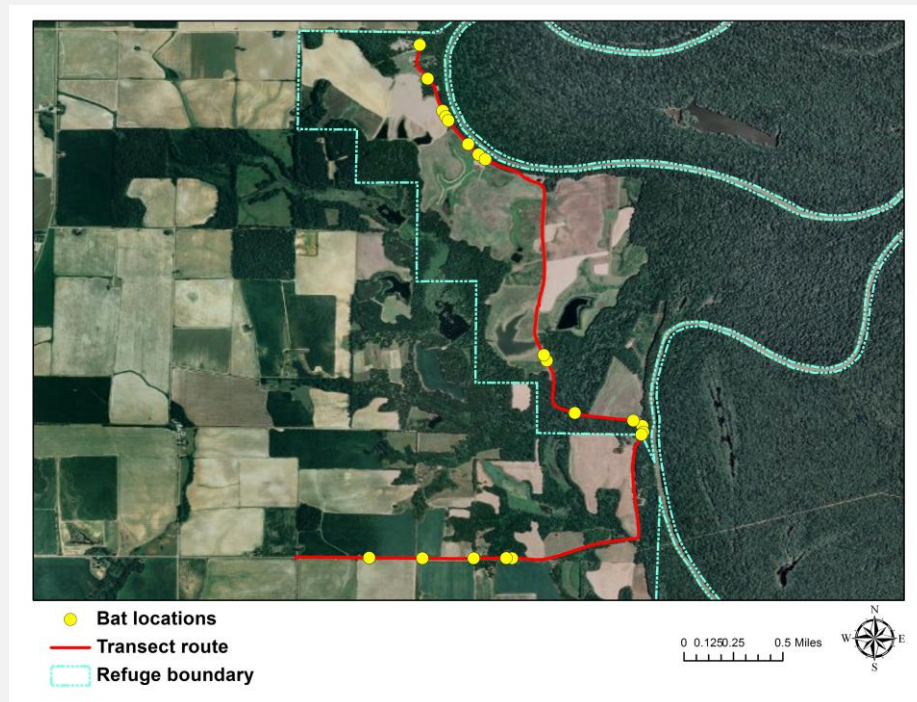
**Survey Date:** 7/17/2012

**Survey route completed?** ☒

**Number of bat calls recorded:** 20

**GPS data collected?** ☒

**Total length of transect (miles):** 4.6



<b>Observer 1:</b> Tabitha	Holloway
<b>Observer 2:</b> John	Stark
<b>Start Time:</b> 8:45:00 PM	<b>End Time:</b> 9:02:00 PM
<b>Start Temp:</b> 87	<b>End Temp:</b> 87
<b>Start Wind:</b> 2	<b>End Wind:</b> 2
<b>Start Cloud:</b> 0	<b>End Cloud:</b> 10
<b>Start Moon Visible?</b> <input type="checkbox"/>	<b>End Moon Visible?</b> <input type="checkbox"/>
<b>Moon Phase:</b>	1/4

## Survey Notes:

Data seperated from Long Lake Transect collected on same .DAT file. QA/QC notes: Farm Unit and Long Lake GTR transect routes run on the same nights and data was manually separated. QA/QC of survey data revealed no errors.

# WHITE RIVER NATIONAL WILDLIFE REFUGE

## Route Name: WhrNWR Long Lake GTR

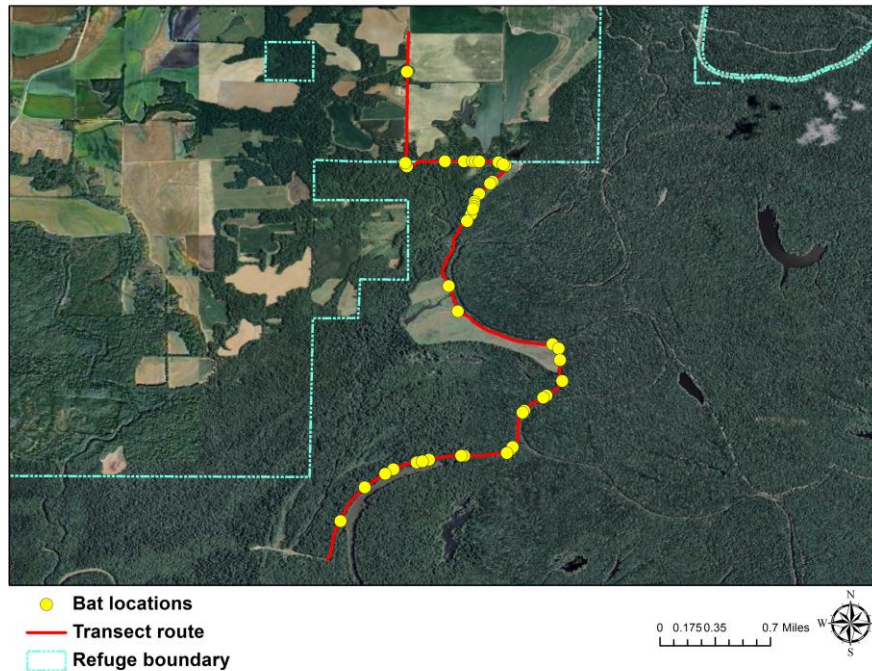
Survey Date: 6/25/2012

Survey route completed? ☒

Number of bat calls recorded: 45

GPS data collected? ☒

Total length of transect (miles): 5.14



<b>Observer 1:</b> Jay	Hitchcock
<b>Observer 2:</b> John	Stark
<b>Start Time:</b> 9:11:00 PM	<b>End Time:</b> 9:26:00 PM
<b>Start Temp:</b> 86	<b>End Temp:</b> 84
<b>Start Wind:</b> 0	<b>End Wind:</b> 0
<b>Start Cloud:</b> 0	<b>End Cloud:</b> 0
<b>Start Moon Visible?</b> <input checked="" type="checkbox"/>	<b>End Moon Visible?</b> <input checked="" type="checkbox"/>
<b>Moon Phase:</b> 1/4	

### Survey Notes:

Data separated from Farm Unit Transect collected on same .DAT file, Sensitivity Knob put at Zero from 9:05-9:11. QA/QC notes: Farm Unit and Long Lake GTR transect routes run on the same nights and data was manually separated. QA/QC of survey data revealed no errors.

# WHITE RIVER NATIONAL WILDLIFE REFUGE

## Route Name: WhrNWR Long Lake GTR

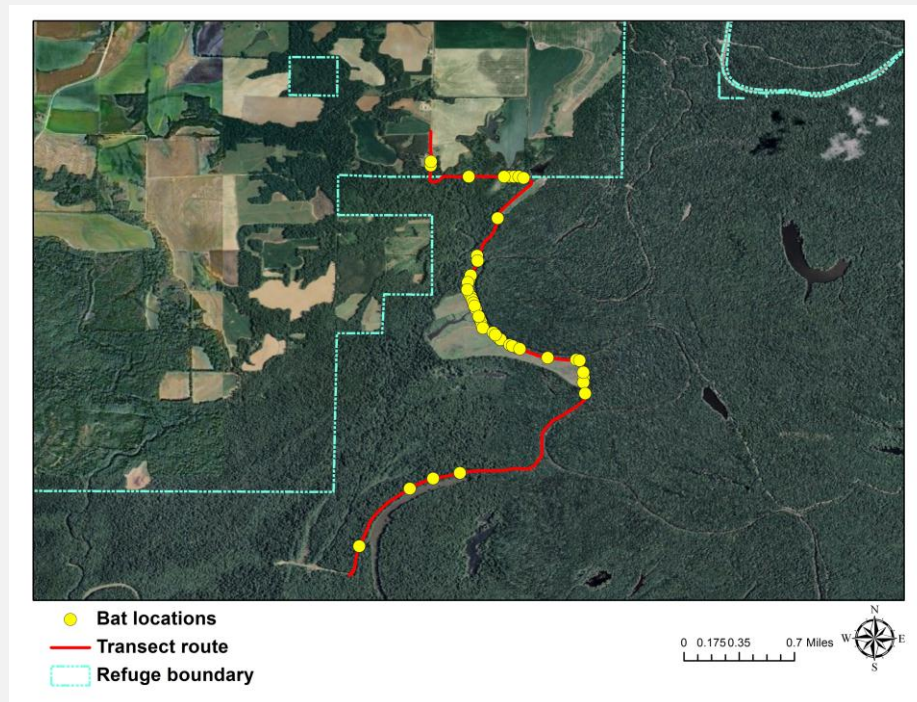
Survey Date: 7/17/2012

Survey route completed? ☒

Number of bat calls recorded: 45

GPS data collected? ☒

Total length of transect (miles): 4.62



Observer 1: Tabitha

Holloway

Observer 2: John

Stark

Start Time: 9:09:00 PM

End Time: 9:25:00 PM

Start Temp: 87

End Temp: 87

Start Wind: 2

End Wind: 2

Start Cloud: 0

End Cloud: 0

Start Moon Visible? ☐

End Moon Visible? ☐

Moon Phase: 1/4

### Survey Notes:

Data separated from Farm Unit Transect collected on same .DAT file, Sensitivity Knob put at Zero from 9:02-9:09. QA/QC notes: Farm Unit and Long Lake GTR transect routes run on the same nights and data was manually separated. QA/QC of survey data revealed no errors.